Iowa Crash Analysis Tools

Access ALAS

(ALAS = Accident Location and Analysis System)

For more information:

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Access ALAS was released for statewide distribution in September 1999. Now, a year and a half later, over 300 customers in state, local, and federal offices across Iowa have attended the half-day of free training and taken delivery on the package (composed of a user guide and two CD-ROMS containing the software, seven years of data, and node map lookup tool).

Access ALAS retained these features of PC-ALAS (Iowa's older software):

--Easily distributed free to users statewide
--Users need only the standard desktop computer and computer skills
--Each query is completely documented as to location, time interval, and filters selected. This query record is easy to print out with the results for future reference or replication.
--Location can be queried by node, intersection node, link, or node string, as well as mile post, mile point, municipal boundary, county, or statewide.
--Report formats may be selected from a list of report options that users requested as meeting most of their needs.

The Access ALAS version permitted these improvements over PC-ALAS:

--Statewide dataset provided to each user instead of county subset, with ability to customize geographic areas most frequently used. For example, a small town in Polk County could create its own subset from that populous county and speed up queries. DOT Districts, Iowa State Patrol Districts, and Municipal Planning Organizations can select the multi-county subset matching their jurisdiction from a pick list.

--Municipalities and highway corridors spanning multiple counties can be queried in one step. Previously, the portion in each county had to be done separately. Now, a town that straddles county boundaries can be queried in one step. Corridors can be queried from any user-determined end points.

--Still requiring node maps for most specific locations, Access ALAS comes with an ArcExplorer node map lookup CD for the entire state. The printing and storing of cumbersome paper node maps is a thing of the past.

Coming in future versions:

A version of Access ALAS will be released soon that allows users to select locations from a map within a single application program. The year 2000 crash data is located via coordinates only. Once that year is released, this enhancement to the software will be essential for using Access ALAS for that year and subsequent years.

A Visual Basic version is planned for the “next generation” of analysis software, called “VB ALAS”. Preliminary timeline for development is one year.

Limitations of Access ALAS:

Queries of multiple years and large areas do bog down. Statewide analyses are just not done with this tool, although they are possible.

The software was designed to use all the power of Access if Access is running in the background. Unfortunately, Ms Office 2000 is incompatible. Access ALAS must be used as a run-time program only, unless Access 97 is available.

Access ALAS does not interface with other kinds of safety data, such as traffic volume data that could be used for computing crash rates.

Access ALAS cannot be used directly with the TraCS local data set. VB ALAS will probably be the first non-GIS based “canned query and report” tool that can be used with TraCS. (TraCS users can use ordinary Microsoft Access with their data, however.)